

Special Report of the Mass.
Rehabilitation Commission 2440
by
COMMONWEALTH OF MASSACHUSETTS

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The Commonwealth of Massachusetts

SPECIAL REPORT

OF THE

MASSACHUSETTS REHABILITATION COMMISSION

UNDER CHAPTER 62 OF THE RESOLVES OF 1958.

DECEMBER 30, 1958

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The Commonwealth of Massachusetts

MASSACHUSETTS REHABILITATION COMMISSION,
37 COURT SQUARE, BOSTON, December 30, 1958.

To the General Court of Massachusetts.

In compliance with chapter 62 of the Resolves of 1958, a report on matters relating to House Documents 1216 and 1217 is submitted herewith.

FRANCIS A. HARDING,
Commissioner.

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FOREWORD.

Questions relating to the equipping and maintaining of sheltered workshops for the training and retraining of handicapped people are far reaching. The employment problems of workers, deriving from age, chronic illness or impairments, or other disabilities, are likewise very extensive. This report cannot provide the thorough review which seems necessary.

An effort is made here to consider the employment difficulties of older and handicapped workers as well as the nature of the vocational adjustment services which can be most useful. Although basic problems are discussed, far more detailed investigation is needed to develop a sound program of vocational services to benefit both the handicapped people and the Commonwealth of Massachusetts.

This report has been prepared by Mr. Hollis M. Leverett, consultant to the Massachusetts Rehabilitation Commission.

The Commonwealth of Massachusetts

RESOLVE AUTHORIZING STUDY.

CHAPTER 62.

RESOLVE PROVIDING FOR AN INVESTIGATION AND STUDY BY THE MASSACHUSETTS REHABILITATION COMMISSION RELATIVE TO EQUIPPING AND MAINTAINING OF SHELTERED WORKSHOPS BY MUNICIPAL CORPORATIONS AND RELATIVE TO THE NEED FOR SUCH WORKSHOPS FOR THE TRAINING AND EMPLOYMENT OF THE DISABLED IN THE COMMONWEALTH.

Resolved, That the Massachusetts rehabilitation commission is hereby authorized and directed to make an investigation and study of the subject matter of current house documents numbered 1216, relative to providing for the equipping and maintaining of certain sheltered workshops by municipal corporations; and of 1217, relative to the need for sheltered workshops for the training and employment of the disabled in the commonwealth. Said commission shall report to the general court the results of its investigation and study and its recommendations, if any, together with drafts of legislation necessary to carry such recommendations into effect, by filing the same with the clerk of the house of representatives on or before the last Tuesday of December in the current year. *Approved April 16, 1958.*

The Commonwealth of Massachusetts

In the Year One Thousand Nine Hundred and Fifty-Eight.

AN ACT PROVIDING FOR THE EQUIPPING AND MAINTAINING OF CERTAIN SHELTERED WORKSHOPS BY MUNICIPAL CORPORATIONS.

1 *Whereas*, The deferred operation of this act would tend to
2 defeat its purpose which is to immediately provide for its bene-
3 fits, therefore, it is hereby declared to be an emergency law,
4 necessary for the immediate preservation of the public con-
5 venience.

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:

1 Chapter 74 of the General Laws is hereby amended by adding
2 at the end under the caption "SHELTERED WORKSHOPS," the
3 following section:—

4 *Section 56.* Any municipal corporation may equip and main-
5 tain sheltered workshops established by any non-profit organiza-
6 tion chartered by the board of education and approved by the
7 state department of education for the purpose of providing suit-
8 able training and retraining for work for persons who, because
9 of age, chronic physical illness or impairments, cannot find train-
10 ing, retraining or remunerative work elsewhere. The state de-
11 partment of education shall make such rules and regulations
12 for the operation and use of such sheltered workshops as may
13 be necessary to carry out the purposes of this act, except that
14 such rules and regulations shall not contravene rules and regu-
15 lations to be made by the department of labor and industries
16 with regard to wages, hours of work, conditions of work and
17 other matters now under the jurisdiction of such department.

The Commonwealth of Massachusetts

In the Year One Thousand Nine Hundred and Fifty-Eight.

RESOLVE PROVIDING FOR A SPECIAL COMMISSION TO MAKE AN INVESTIGATION AND STUDY OF THE NEED FOR SHELTERED WORKSHOPS FOR THE TRAINING AND EMPLOYMENT OF THE DISABLED IN THE COMMONWEALTH.

1 *Resolved*, That an unpaid special commission, to consist of
2 three members of the house of representatives to be designated
3 by the speaker thereof, two members of the senate, to be designated
4 by the president thereof, the commissioners of rehabilitation,
5 public health and public welfare, and three members to be
6 appointed by the governor, is hereby established to make an
7 investigation and study of the need for sheltered workshops for
8 the training and employment of the disabled in the common-
9 wealth.

10 Said commission shall be provided with quarters in the state
11 house or elsewhere in the city of Boston, may travel within the
12 commonwealth, may engage such technical and clerical assistance
13 as may be necessary, shall hold hearings for such purposes
14 as may be pertinent to the study and may expend such sums as
15 may be appropriated therefor. Said commission shall report to
16 the general court the results of its investigation and study, and
17 its recommendations, if any, together with drafts of legislation
18 necessary to carry such recommendations into effect, by filing
19 the same with the clerk of the house of representatives on or
20 before the first Wednesday of December in the current year.

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The Commonwealth of Massachusetts

SUMMARY.

1. This report has been prepared by the Massachusetts Rehabilitation Commission following instructions contained in chapter 62 of the Resolves of nineteen hundred and fifty-eight. This chapter provided for an investigation and study on the subject matter of House Documents numbered 1216 and 1217.

2. House Document 1216 relates to the equipping and maintaining of sheltered workshops by municipal corporations; House Document 1217 concerns the establishment of an unpaid special commission to investigate and study the need for sheltered workshops for the training and employment of the disabled in the Commonwealth.

3. In the absence of facilities and time for a thorough investigation of matters relating to House Documents 1216 and 1217, the present report can best be considered a preliminary statement. An effort is made to outline the nature of the problems relating to the establishment of sheltered workshops and to indicate the areas wherein additional research is necessary.

4. Generally speaking, there does not appear to be either a clear definition for or an adequate understanding of the nature of sheltered workshops. For the most part, these facilities are established to provide remunerative employment for workers who are marginally productive and, therefore, not employable by business or industry. In reality, however, they vary from competitively productive business enterprises to service shops providing a kind of recreational "work" activity.

5. The need for sheltered workshops may be very real and the services can meet important needs. On the other hand, some caution must be exercised in areas where purposes and methods are unclear. It is highly desirable that any program for the establishment of sheltered workshops be based upon a clear understanding of (a) the kinds of service to be offered, (b) the kinds of handicapped people to be served, and particularly, (c) the level of productivity expected from clients or employees.

6. In the establishment of sheltered shops for the employment of marginal workers, it is not certain that adequate facilities would be provided for the training and retraining of individuals for placement in the competitive job market. A facility designed for the less-than-competitively-productive worker is not likely to provide

the best instruction for people capable of working in business or industry. In fact, experience in a true sheltered workshop may be undesirable in that it may not provide strong support for a handicapped person who is seeking employment elsewhere.

7. In all probability, there is need for a large facility designed specifically for the purpose of training and retraining handicapped people for competitive employment. Ample means would have to be available to determine the vocational potential of different kinds of handicapped persons and to provide the various kinds of training needed to develop skills along lines suited to the talents and limitations of the individual as well as along lines which take advantage of the job opportunities available to the individual.

8. Handicaps to employment are many and varied. Brief consideration is given to the usual definitions but more specific consideration is given to the problems of the older worker and the problems of the disabled worker. Evidence is presented to show that, although disablement and age can be considered different kinds of handicap, they are not unassociated. Older workers can be expected to demonstrate a higher frequency of chronic diseases and disabling injuries.

9. With regard to the special problems of the older worker:

(a) Consideration is given to data which indicate that numerous jobs and occupations are not durable in the sense that workers can remain employed to the normal retirement age of about 65 years.

(b) Workers over 45 years of age encounter difficulties in obtaining employment. Various aspects of the problem are reviewed with reference to differences between employed and unemployed groups, and the occupations in which older workers are placed.

(c) Noting general trends in both life and working expectancy in the population, it is certain that, whatever may be the problems of the older workers, the number of people involved is very large and growing.

10. The disabled workers may be considered in two general classes. First, there are the individuals who, because of handicaps existing from birth or from an early age, have not been able to initiate a sound work career. Second, there are the individuals who, after a work career has been undertaken, encounter disease or injury which renders it impossible to continue in the same kind of work. The vocational adjustment problems of both groups of handicapped persons require services of considerable scope.

11. The specialized services available to handicapped persons through the Division of Employment Security, the Massachusetts

Rehabilitation Commission, and the Division of the Blind are reviewed briefly.

12. Adequate data on which to base an estimate of the need for sheltered workshops and other facilities are not available. As an indication of the magnitude of the problem, however, some statistics on groups likely to require vocational adjustment services are presented. Where possible, statistics are taken from reports of agencies concerned with handicapped or potentially handicapped people.

13. Following a limited review of certain questions relating to House Documents 1216 and 1217, certain conclusions and recommendations seem indicated:

(a) In view of the uncertainty regarding the nature of sheltered workshops, programs must be developed with careful consideration of the services to be offered and the kind of handicapped person to be employed.

(b) Since sheltered workshops are designed for the employment of marginally productive workers, caution is advised regarding the acceptance of these facilities as promising means for training and retraining handicapped persons for competitive employment.

(c) In order to meet the needs of the handicapped in training and retraining for employment, consideration should be given to a special facility designed for training purposes and co-ordinated with vocational adjustment services of considerable scope.

(d) Taking into consideration the limitations of the present report, it appears most desirable that House Document 1217 or a comparable action be taken to provide for a thorough investigation and study of (1) sheltered workshop and training workshop facilities, and (2) the need for developing or expanding such facilities as part of a comprehensive vocational adjustment service for older and handicapped people.

I. THE NATURE OF SHELTERED WORKSHOPS.

House Documents numbered 1216 and 1217 concern the need for and the establishment of Sheltered Workshops to serve handicapped people.

The facilities known as workshops vary greatly and there is relatively little agreement on the exact nature of the services offered. It is desirable, therefore, to note certain important characteristics of sheltered workshops especially those relating to the people served and to the economics of the enterprises.

For simplicity, reference may be made to four kinds of facilities designated as (1) The Competitive Workshop, (2) The Sheltered Workshop, (3) The Charitable Workshop and (4) The Service Workshop.

(1). *The Competitive Workshop* is one which employs handicapped individuals who are fully productive under the special conditions provided. Certain handicapped people are unemployed because they cannot meet the usual requirements of travel to and from work or because they require special adjustments in the conditions of work in order to attain full productivity. Where business and industry cannot provide employment, unique opportunities may be afforded in competitive workshops.

These workshops are essentially small business enterprises employing handicapped people who, under special arrangements, can be and are fully competent and productive workers. The programs are conducted with very moderate subsidy, if any. Standards of work performance and wages are maintained at normal levels and, in a strict sense, the workshop is not "sheltered." The basic demand for effective productivity is maintained for each worker and for the business as a whole.

(2). *The Sheltered Workshop* is one designed to provide remunerative employment for handicapped persons whose productivity is marginal. Special conditions of work may be provided as needed but allowances are made for less-than-normal productivity by the Workers. It is intended that employees should earn a reasonable amount in accordance with standard rates for the work done. Wages are expected to be below par, however, and from the business viewpoint no profits are likely. Ordinarily, it is intended that the sheltered workshop become practically self-sustaining, that is, capable of continuation without subsidy.

Workshops of this kind serve the purpose of employing individuals who cannot be considered adequately employable by business or industry. It is expected, however, that productivity attain a level which would permit the payment of worth-while wages. In this way, the less-than-competitive productive capacity of some handicapped workers may be utilized.

(3). *The Charitable Workshop* may be considered one designed to serve handicapped workers who are submarginal in productivity. The program is essentially dependent upon an original and a continuing subsidy, and the earnings of the workers based on output are expected to be very moderate.

A matter of major concern in workshops of this nature is the extent to which several dollars in subsidy might be expended for each dollar earned by the workers. A point of diminishing returns exists since, at some level, payments in cash would constitute a sounder method for financing the relatively unproductive disabled individuals.

(4). *The Service Workshop* is one wherein true employment and productive work have no major significance. Essentially, an effort is made to provide a therapeutic or recreational service as planned activity or "work" for seriously handicapped people. Neither production nor wages are expected to reach a good level. A desirable service is rendered in a social-club spirit; persons may be happily occupied if not gainfully employed in the true sense. The return for products manufactured or services rendered is negligible and the program is financed almost exclusively by subsidy.

The exact nature of workshops is not clearly defined. Facilities to serve the handicapped range from (1) effective business operations with competitively productive employees to (4) social and recreational activities for people who are unproductive and unemployable. Especially difficult to evaluate are the complex combinations of goals and functions in given operations. A program may have the intent of a Competitive Workshop, the spirit of a Service Workshop, and the economics of a Charitable Workshop. Under these circumstances, efforts to aid the disabled workers through sheltered workshop undertakings are frequently complex, if not confusing.

In general, a sheltered workshop is considered to be a facility designed to provide remunerative employment for handicapped persons whose productive capacity is limited. Thus, the people served are those who cannot attain the level of performance demanded of workers in competitive employment. It may be expected, nevertheless, that the sheltered workshops provide suitable employment opportunities wherein wages may be earned in accordance with an individual's ability to be effectively productive. In establishments of this nature, however, it must be recognized that, the lower the level of productivity, the greater must be the subsidy provided. Clearly, there is a point where direct payments to the handicapped may constitute the soundest method for providing income.

Each of the four kinds of workshop noted here can serve an important purpose and meet an existing need. Care must be taken, however, that the kind of service provided by any agency be speci-

fied. Furthermore, the employees in any facility must be suited to the program in which they are placed. Much of the current uncertainty in the field of workshops can be eliminated when these matters are clarified.

This section on the nature of sheltered workshops refers to the basic concept of these facilities as means for providing employment for handicapped persons with marginal productive capacity. Matters of training for competitive employment in business or industry introduce a new set of questions which require careful study and evaluation.

II. TRAINING AND RETRAINING FOR WORK.

The employment problems of people handicapped by age, chronic physical illness or impairment, or disabled in some way are matters for serious concern. Generalized solutions of the difficulties are not available. Each handicapped person encounters occupational difficulties which are more or less unique. Furthermore, an effective solution of the vocational problems tends to be very specific for the individual.

In some instances, the services of a sheltered workshop may constitute an appropriate, perhaps the best, answer to an employment problem. As a general approach to the vocational adjustment of handicapped people, however, the services may be very inadequate. The basic question concerns the extent to which the traditional sheltered workshop can provide the kind of training needed for sound placement in competitive jobs of business and industry.

Employers have reason to be wary of handicapped persons who have no work experience or work experience that is not relevant to the available job openings. A strong candidate for employment must be able to present evidence of productivity and occupational skills of some kind. Only with training and experience can the handicapped individual compete for job opportunities as one qualified for certain kinds of work at a known level of productivity.

With specific reference to training, any sheltered workshop may be expected to provide basic instruction for the kind of work being done in the shop. On the other hand, recognizing the facility as one designed especially to provide employment for marginally productive workers, the training would not constitute the best means for supporting an application for employment in business or industry. Generally speaking, work in a shop where individual pro-

ductivity is at a relatively low level would not be considered as providing the most desirable realistic training.

Handicapped people present a very wide range of talents as well as a great variety of limitations deriving from the different kinds of disability. For each individual, the existing talents and limitations must be considered in occupational terms and a plan must be devised to achieve a sound vocational adjustment. This requires a comprehensive analysis of many aspects of the employment problem. It may be expected, also, that the goal of the plan devised would, whenever practicable, be sound placement in the competitive job market. Working with a handicapped person, the evaluation of the employment problem, the determination of the salable or potentially salable talents, and the development of sound plans for a durable vocational adjustment constitute a series of complex tasks. Small sheltered workshops designed to employ marginal workers in various communities are not likely to have the necessary means for these evaluation and training services. The range of services must, of necessity, be limited.

In all probability, an adequate vocational service for the handicapped people must be a relatively large facility with ample staff to guide the program. Only in this way would it be possible to meet the needs of many different kinds of people with many dissimilar handicapping conditions. For effective results, there must be ample means for determining an individual's vocational potential as well as for training along lines which utilize the more promising talents in occupational areas where employment opportunities exist.

Sound job training can best be achieved in a realistic, competitive kind of work situation wherein handicapped persons can be instructed and evaluated in relation to possible employment in business or industry. A training service with this basic orientation would be most effective for those considered capable of being placed in regular employment. Ordinarily, this kind of program would not be described as a sheltered workshop service. It would be better considered a specialized vocational adjustment service intended to work with handicapped persons and to help solve the existing occupational or employment problem.

If a facility designed to train for competitive employment is developed, it must be recognized that not all handicapped persons can attain the level of productivity demanded by business and

industry. For these people, a sheltered workshop can provide the needed opportunities for remunerative employment. This important service should not, however, be confused with one designed to build work capacity to truly competitive levels.

Although sheltered workshops can and do serve important purposes, some caution is indicated with reference to the acceptance of these facilities as adequate means for training and retraining handicapped people for truly competitive employment. It is recognized, nevertheless, that other important needs of handicapped persons can be met by various kinds of sheltered workshops.

III. HANDICAPS TO EMPLOYMENT.

The criteria by which an individual may be designated as handicapped for employment purposes are not subject to simple and brief description.

From the medical viewpoint, an impairment can be any disease, injury, imperfection or limitation which deviates from the accepted range of normality. These physical, physiological, or mental deviations range from minor abnormalities of little or no vocational significance to conditions which may restrict or eliminate all kinds of vocational activity.

From the viewpoint of the vocational counselor, inadequate vocational adjustments may be traceable to social, psychological, industrial and other factors, as well as to the more apparent diseases and disabilities. There are many sources of the difficulties which constitute handicaps for some individuals and upset or prevent effective stable adjustment to employment.

The Massachusetts Rehabilitation Commission has very useful standards by which eligibility for services is determined. Three factors are involved. First, the person must have a physical or mental defect; second, this defect must constitute a substantial handicap to employment; and, finally, with the services available, there must be a reasonable expectation that a sound level of employability and employment can be achieved.

The Division of Employment Security considers a handicapped applicant to be one who has a physical, mental or emotional impairment or condition included in a given list of disabilities, or one who needs certain specialized services to obtain a job, or one who is a veteran rated 10 per cent or more disabled by the Veterans Administration, or retired for physical disability by the armed forces.

Other ways of designating the nature of disability or handicap are possible. For example, a disabled person may be considered one who is unable to do his regular work or carry on other duties because of disease or injury. Similarly, a disability may be defined as a physical or mental condition which prevents an individual from carrying on the usual duties such as working, going to school, or keeping house (1). From the viewpoint of the employer, handicaps can be described with reference to ability to do a particular job, the need for special job placement, or decreased flexibility with regard to transfers from job to job (8).

The definition of employment handicaps related to age are less easily specified but the problems of the older worker are reasonably well known. One of the documents under consideration is concerned with the person who, because of age, cannot find training, retraining or remunerative work. It is generally understood, also, that the employment problems of the older worker become marked at age 45 and beyond. In some respects, the vocational difficulties of the older worker are similar to those of other handicapped persons; in others, they are very different.

Disablement and Age.

House Document No. 1216 makes reference to the employment problems of individuals handicapped by age, chronic physical illness or impairments. In a similar manner, House Document No. 1217 is concerned with the disabled. It would perhaps be reasonable to consider also the problems of individuals whose dominant vocational handicap may be classified as mental, social or intellectual. It is important to recognize also that, whatever the nature of the handicap, and analysis of the employment problem for any individual has many components.

Ordinarily, the vocational problems of the aging population are considered to be those following from superannuation in a particular occupation and from disablement by accident or disease. The problems of age and disablement may differ in some respects but they are not unassociated. The longer individuals live, the greater is the exposure to the hazards of disablement by accident or disease. The older workers may be expected to have a larger number of physical and, perhaps also, of mental handicaps than the younger workers. The extent of the association between age and disability

can hardly be determined without detailed study but some evidence is at hand.

Bigelow and Lombard reported on the morbidity rates of certain chronic diseases in Massachusetts (2). Table 1 shows the rates per 1,000 population for various age groups. At first one might be tempted to question the validity of these data since they were gathered in the period between 1929 and 1931. In a more recent report, however, evidence is presented to show that no significant changes in the morbidity rates have occurred (5). The findings can be considered as approximately correct now.

Table 1 indicates that for the total population which combines male and female data there is a consistent growth in the numbers affected by chronic diseases. For those under 20, the rate is 18.5 per thousand of population; for those between 40 and 44 years, the rate is 171.9 per thousand; for the age group 60 to 64, 374.6 per thousand. The general trend continues and, for those 80 years of age and over, the chronic disease rate is 707.5 per thousand.

TABLE 1. — *Morbidity Rates for Chronic Diseases, by Age and Sex.*

RATE PER 1,000 OF POPULATION.

AGE.	Males.	Females.	Total.
-20	19.9	17.1	18.5
20-39	51.5	67.2	60.0
40-44	152.1	189.9	171.9
45-49	172.6	252.0	214.2
50-54	208.4	291.4	251.0
55-59	269.5	348.6	310.3
60-64	322.1	421.1	374.6
65-69	374.1	491.6	437.3
70-74	530.9	589.4	562.7
75-79	614.9	701.4	661.7
80	673.6	729.9	707.5

From a slightly different viewpoint, census data might be used to show that the number of people not in the labor force and unable to work increases markedly with age. Table 2 shows this kind of data for Massachusetts. At the time of the 1950 census, 395,315 males were classified as "not in the labor force;" of these, 87,705 or 22.2 per cent were classified also as "unable to work." In con-

trast to this average 22.2 per cent figure, it may be seen for the age group 14 to 44, only 3.2 per cent were unable to work; for the age group 45 to 64, 36.6 per cent; for the age group 65 years and over, 47.7 per cent. These figures represent individuals more disabled and more handicapped for employment than those tabulated as suffering from one chronic disease or another.

TABLE 2. — *Status of Persons not in Labor Force, 1950 Census, Massachusetts.*

MALES NOT IN LABOR FORCE.

AGE.	Total.	UNABLE TO WORK.	
		N.	Per Cent.
14-44	218,510	9,105	3.2
45-64	55,540	20,335	36.6
65 and over	121,265	58,265	47.7
Total	395,315	87,705	22.2

Considering this general association between disablement and age, it may be observed that in 1956 the population of Massachusetts included 1,084,000 persons between ages 45 and 64, and 516,000 persons 65 years of age and over (12). The numbers are large and marked increases in these numbers are to be expected in the future.

IV. THE OLDER WORKER.

The working life of an individual is considered generally as beginning at about age 20 and continuing to about age 65, a period of approximately 45 years. The first ten years may be exploratory; several occupations or groups of occupations may be tried. At age 30 to 40, it is usually expected that the worker finds a suitable occupation at which he continues to work until retirement.

Despite this general conception, there are many changes in workers' jobs and occupations. Sometimes, the changes reflect progress to better and more suitable employment. Recognition must be given to other possibilities, however. Certain occupations are not continuously suitable throughout the working life of an individual. Changes in jobs and in industries can displace employees, including those who appear well placed from the occupational viewpoint. For the present purposes, it is desirable to inquire concerning the employment problems of the workers, particularly

those relating to age as such. Possibly age alone can force a worker to leave a job and an occupation. Under these circumstances, the effect of age may be somewhat like the effect of disability resulting from accident or disease.

Durability of Careers.

Occupations differ considerably with regard to the number of persons who can continue at work until the normal retirement age. The more obvious examples of hazardous jobs with high physical demands might be cited as typical brief careers, but many kinds of work present different patterns in the age of entry and the age of departure. Relatively little is known concerning the adjustments made by workers when they leave various ones of the less durable occupations.

A study conducted in England (3) presents interesting estimates of the durability of careers in various kinds of work with reference to the per cent of the workers likely to survive in employment to ages in the mid-sixties. Table 3 summarizes the findings for a group of occupations. At the high survival rates, 75 to 85 per cent, there are the watchmakers and makers of musical instruments. At the low survival rates are miners working at the coal-face, construction workers, foundrymen. Ranging between these extremes are many important occupational groups which show wide differences in the per cent of workers remaining on the job to the normal retirement age, about 65.

It seems certain that a study of occupations in this country would yield similar data. The essential implication of the findings is that alternative jobs are extremely important for large numbers of workers. What is the nature of the vocational adjustments made by workers in certain less durable occupations when they are forced to locate other employment? Do they drift without direction as unemployed dependents, obtain employment which is not suited to their talents, or settle into the kinds of job where special skills and abilities seem to have little significance?

The lack of durability in various work careers may account for many difficulties. Where there is, in addition, impaired health or physical disability, some efforts may be made to solve the vocational problem. In many instances, however, the older worker with normal productive efficiency may not obtain the services necessary to evaluate his potential abilities and to locate suitable employment. Ex-

TABLE 3. — *Occupations Grouped by Estimated Percentage of Workers able to continue in Employment to Conventional Retirement Age.*

PERCENTAGE SURVIVAL.	Occupation.
75-85	Makers of watches and clocks. Workers in precious metals. Makers of musical instruments.
65-75	Farmers. Agricultural workers. Foresters. Carpenters. Bricklayers.
55-65	Surface workers (mines). Welders. Makers of boots and shoes. Plumbers. Plasterers. Bargemen. Dockers. Shop assistants. Warehousemen.
45-55	Miners below ground (not at coal-face). Makers of bricks and pottery. Makers of glass. Smiths. Platers. Riveters. Makers of tobacco. Cabinet-makers. Compositors.
35-45	Foundrymen. Makers of paper. Drivers of trams, etc. Drivers of self-propelled vehicles. Bus conductors.
25-35	Constructional engineers.
5-15	Coal-face workers. Signalmen.

actly what does happen to the worker who completes the normal working life in a given occupation and, thereupon, is compelled to relocate in some other field? Does he know about his salable talents? Does he know how to locate positions? Can he obtain help? How much productive capacity may be lost when a worker leaves an occupation in which he has spent most of his working life and is not relocated in suitable employment?

There are obviously many unanswered questions regarding the resettlement of workers who must leave the less durable jobs and occupations. In general, the younger workers can make the necessary adjustments without serious consequences. The older workers have greater difficulty.

Workers Over 45 Years of Age.

In 1956, the Division of Employment Security reported a study of employed and unemployed workers in the Worcester area (6). A large amount of information is contained in the report but, for the present purposes, certain findings are of special interest.

Considering first the people who were employed at the time of the study, Table 4 shows the percentage distribution of all workers among the seven major occupational groups. In the last column, the proportion of workers over 45 in each classification is shown. For all occupations, 39.1 per cent of the workers were over 45. The service occupations showed the highest proportion of the older workers, 54.8 per cent; the next highest was 44.6 per cent for the professional and managerial group. The lowest figure was 30.8 per cent for clerical jobs; the next lowest, 33.3 per cent for unskilled jobs.

TABLE 4. — *Distribution of All Workers by Major Occupational Groups and the Per Cent of Workers 45 Years and Over in Each Group.*

OCCUPATIONAL GROUP.	All Workers.	Per Cent of Workers 45 and Over in Each Group.
Professional and managerial	10.4	44.6
Clerical	17.1	30.8
Sales	7.7	41.4
Service	5.2	54.8
Skilled	24.6	42.4
Semiskilled	22.2	38.3
Unskilled and other	12.8	33.3
All Occupations	100.0	39.1

Examining these data, it is evident that age is related to occupation. Although the workers over 45 constitute 39.1 per cent of all workers, they fill 54.8 per cent of the service jobs and, by contrast, only 30.8 per cent of the clerical jobs. Other variations may be noted in Table 4 and many questions raised. For example, does the high proportion of older workers in service occupations reflect a general placement pattern for the older workers displaced from other occupations because of age? A study of this possibility would assist in the effort to understand better the problems of the older worker.

Various kinds of industry reflected interesting differences in the employment of older workers. Although 39.1 per cent of all workers were over 45 years, only 24.0 per cent of the employees of companies engaged in finance, insurance and real estate were in this age group. By contrast, 42.9 per cent of the employees of manufacturers of non-durable goods were 45 or over. Considering male employees, 30.5 per cent of those in finance, insurance and real estate and 43.6 per cent of those in the manufacture of non-durable goods were 45 or over. Women employees over 45 years constituted: 20.2 per cent in finance, insurance and real estate, 47.5 per cent in the retail trades (6).

In view of these findings, it seems evident that many factors influence the durability of careers into the later years. The question remains one of determining what happens to the older workers who are unable to continue at a given job or occupation until the normal retirement age. Do they need assistance for sound readjustment?

Under conditions wherein some workers encounter the need to change jobs, occupations, and perhaps industries, before reaching retirement age, it is of special interest to consider the findings relating to the unemployed worker over 45.

One indication of the problem of the older worker appeared in the following comparison: Among the employed, 39.1 per cent were over 45; among the unemployed, 52.4 per cent were over 45. The magnitude of this difference may have been exaggerated by the inclusion of many unemployed over age 65 but the evidence was very clear for men over 55 and for women over 45 (6).

Of special interest is the finding that the older worker has longer periods of unemployment than the younger worker. During the three-year period of the study, almost half the older workers were jobless six months or more; only one-fourth of the workers under 45 were jobless for this length of time. This would seem to indicate

very clearly the greater difficulty older workers have in locating suitable employment, possibly in locating any employment.

Additional factors of interest concern the industries and the occupations in which the unemployed had worked in the past. In general, however, the study revealed that job opportunities were fewer for the older workers and the employment problems were more complex. Looking to the future, and recognizing the growth in the number of older people, it would be well to consider means by which the productive capacity of older workers can be utilized. Very likely, there is need for some kind of vocational adjustment service to help solve the employment problems.

Placement of Older Workers.

Differences between the occupational placements of older and younger workers are to be expected. There is need to be concerned, however, with the ease or difficulty of the placements and the suitability of the occupations with reference to the optimal use of the workers' talents. Consideration might be given to the possibility that more prompt, more suitable, and perhaps more durable employment might be achieved for older workers if specialized facilities for evaluation, training and placement were available.

Table 5 shows the occupational distribution for 210,753 by the Division of Employment Security between May, 1957, and July, 1958. Data are presented for those under and over age 45 as well as for all workers. A very marked difference between these two age groups appears in the service occupations where 25.2 per cent of those under 45 and 48.8 per cent of those over 45 are placed. The fact that almost half the workers 45 and over are placed in jobs classified as domestic service, personal service, protective service and building service suggests the possibility that opportunities may be limited in other fields.

Perhaps workers who cannot continue with the occupations in which they have spent their early working life are not obviously qualified for other kinds of employment. Employers seeking strong candidates for particular jobs are not likely to investigate the potentials of any given older worker with long experience in another more or less unrelated field. Indeed employers may not be equipped with facilities to make such determinations or able to accept the financial risk involved in employment on a trial basis. Perhaps this is one source of the difficulties encountered by the older workers and one reason why their opportunities seem limited.

No answers to the problems in this area can be developed here. The questions are raised, however, to help clarify the employment problems of older workers. In addition to more careful study of this problem, consideration of the possible effectiveness of vocational adjustment services in sheltered workshops or other facilities appears to be indicated.

TABLE 5. — *Placements by the Massachusetts Division of Employment Security by Age Groups and Occupational Classification, May, 1957, through July, 1958.*

PLACEMENTS.

OCCUPATIONS.	UNDER 45.		45 AND OVER.		TOTAL.	
	N.	Per Cent.	N.	Per Cent.	N.	Per Cent.
Professional and managerial	15,388	08.8	1,734	04.7	17,122	08.1
Clerical and sales	34,132	19.6	4,540	12.3	38,672	18.3
Service	43,873	25.2	18,001	48.8	61,874	29.4
Skilled	11,153	06.4	3,360	09.1	14,513	06.9
Semiskilled	26,140	15.0	4,546	12.3	30,686	14.6
Unskilled and other	43,150	24.8	4,736	12.8	47,886	22.7
Total	173,836	100.0	36,917	100.0	210,753	100.0

The Aging Population.

Between 1900 and 1950, life expectancy for men increased from 48.2 to 65.5 years. For women, the increase was from 50.7 to 71.0 years. Indications are that this general trend is continuing.

Wolfbein (14) estimates that, in the year 2000, the length of life might show more dramatic increases. Table 6 reveals the estimates in terms of the number surviving to given ages for each 100,000 live births. For men, under assumed conditions in 2000, 78,575 would survive to age 65; 25,473, to age 85. Similarly, for women, 87,496 would survive to age 65; 37,535, to age 85. Compared with 1900, the numbers reaching age 65 are up 102.8 per cent for men and 102.3 per cent for women. The numbers reaching 85 are up 391.9 per cent for men and 431.4 per cent for women. In rough figures, the number reaching 65 is doubled and the number reaching 85 is increased four times.

Along with the lengthening of the life span, there has been an increase in the length of working life. This is perhaps fortunate since the general social and economic balance could perhaps be seriously upset by greatly increased unproductive years. It is not now

clear how many relatively unproductive people or how many years of unproductivity on the part of individuals can be supported without serious consequences. The problems in this area are deserving of careful and continued study.

TABLE 6. — *Number of Individuals living to Various Ages for Each 100,000 Live Births under Existing Mortality Conditions in Various Years Plus Estimate for the Year 2000.*¹

MEN.

AT AGE.	1900.	1940.	1950.	1955.	2000.
60	45,895	65,142	71,246	73,136	84,659
65	38,736	55,776	61,566	63,415	78,575
70	30,217	44,588	49,950	51,063	70,449
75	21,076	31,864	36,756	37,845	59,060
80	12,084	18,995	23,237	24,391	43,127
85	5,179	8,693	11,750	12,505	25,473

WOMEN.

AT AGE.	1900.	1940.	1950.	1955.	2000.
60	50,155	73,093	80,890	83,168	91,105
65	43,246	65,523	74,119	76,827	87,496
70	34,721	55,449	64,873	67,188	81,951
75	24,992	42,425	52,111	55,302	72,370
80	15,129	27,524	36,486	40,052	57,620
85	7,063	13,972	20,668	23,165	37,535

¹ Data from Wolfbein, Seymour L., *Length of Working Life*.

The changes in both life expectancy and working life expectancy between 1900 and 1955 are shown in Table 7 for both men and women. For men, life expectancy increased from 48.2 to 66.5 years; working life expectancy, from 32.1 to 42.0 years. For women, life expectancy changed from 50.7 to 72.0 years; working life expectancy, from 6.3 to 18.2 years.

In general, the increased years of life are distributed equally between time at work and time outside the labor force. It is of particular interest that the increase in working life from 1900 to 1955 was 10 years or about 32 per cent for men, 12 years or about 189 per cent for women. This greater number of women-years in the labor force has become very apparent in recent years.

In all probability, the lengthening of the working life plus an increase in individual productivity has lessened the impact of the growing number of years outside the labor force which, as Table 7 shows moved from 16.1 to 24.5 years for men, from 44.4 to 54.7 years for women. The effect of this trend on the problems of the older worker is not entirely clear. It can be said with certainty, however, that, whatever may be the employment problems of the older workers, the number of people involved is very large and growing.

TABLE 7.—*Expectancy of Life and Working Life at Birth in the United States, 1900-1955.*¹

MEN.

YEAR.	Life Expectancy.	Work Life Expectancy.	Years Outside Labor Force.
1900	48.2	32.1	16.1
1940	61.2	38.3	22.9
1950	65.5	41.9	23.6
1955	66.5	42.0	24.5

WOMEN.

YEAR.	Life Expectancy.	Work Life Expectancy.	Years Outside Labor Force.
1900	50.7	6.3	44.4
1940	65.9	12.1	53.8
1950	71.0	15.2	55.8
1955	72.9	18.2	54.7

¹ Data from Wolfbein, Seymour L., *The Length of Working Life*.

V. THE DISABLED WORKER.

The remarkable progress of our society in public health and medical care is reflected not only in the greatly increased number of older people but also in the number of individuals who have survived crippling diseases or disabling injuries. It would appear sometimes that tremendous efforts have been made to assure the survival of individuals while relatively less attention has been given to the vocational problems of the disabled survivors.

Individuals who are disabled from birth or from an early age encounter difficulties in establishing themselves in any kind of work career. In fact, for certain disabled individuals, it is exceedingly

difficult to obtain that first job wherein they can demonstrate their effectiveness at work and learn from experience. For other people who have established vocations and are soundly employed, a crippling disease or a disabling injury can effect a thorough dislocation of the work career and render totally unsuitable the occupation wherein satisfactory progress had been made.

Whether the disabling condition exists from an early age or is acquired by a mature person, there results not only a personal disaster to the individual but also a very complex problem for society. In each instance, there is need to consider what opportunities may exist for the individual to develop vocational competency, have a productive job and gain the advantages of living as an independent and accepted member of society. In the absence of vocational and other services, a number of handicapped people may face unnecessarily a lifetime of dependence upon public and private charities or upon relatives and friends.

In view of the high survival rate, the problem of the disabled workers is of great concern. For many of the handicapped, the normal processes of vocational adjustment are not adequate and special services are needed. The individuals may not be capable of determining either the nature of their vocational talents or the occupational areas in which they can be effectively productive. Furthermore, business and industry cannot be expected to underwrite the employment of handicapped persons in jobs where they are unlikely to succeed. Thus, from both the viewpoint of the individual's understanding of his own capabilities and industry's ability to soundly evaluate handicapped applicants for employment, the general outlook for the sound occupational adjustment of disabled persons is not favorable.

The situation is one wherein the development of remedial measures is almost wholly dependent on private non-profit agencies or publicly sponsored government agencies. It would appear, also, that services designed to improve the vocational adjustment of handicapped persons are essential if, at the present time and in the future, the problems are not to assume serious proportions.

A report of the task force on the handicapped in 1952 (11) indicated that about 250,000 workers are disabled annually to the extent of needing rehabilitation services to overcome the residual handicaps and to perform useful work. In the same publication, reference is made also to accident facts published by the National Safety Council in 1950 wherein 1,850,000 workers were reported as injured

in occupational accidents during 1949. To this might be added 2,600,000 workers injured in automobile accidents, home mishaps and other accidents away from work. The numbers are very large.

Precise information is lacking on the number handicapped for employment purposes and on the proportion of these for whom sound employment might be possible with appropriate vocational services. Nevertheless, the very large number involved would seem sufficient to indicate the need for careful investigation.

In the following section, some statistics are presented to reflect the size of certain groups in Massachusetts which are very likely to include many handicapped persons with serious employment problems. Sheltered workshops would undoubtedly help many persons. A prior need, however, may be a comprehensive evaluation, training and placement service directed at competitive employment where this is feasible. When efforts to attain employment in the existing job market fail for certain individuals, then consideration may be given to the effectiveness of sheltered employment.

VI. SPECIALIZED SERVICES AVAILABLE TO THE HANDICAPPED.

Many state agencies are concerned with aging and handicapped people. Various kinds of service are provided. It would appear, however, that large-scale and comprehensive services of a vocational nature are most evident in three agencies.

Division of Employment Security.

The Division of Employment Security, including the various offices which handle claims for unemployment compensation and provide general placement services, gives considerable attention to the problems of the older workers and the handicapped workers. Where possible, specialized counselors and placement people are assigned to work with applicants in these groups. Effective assistance is provided but the special attention available may not meet the highly individualized needs of many applicants.

The Division has gathered data on the applicants in the active file and on placements for both the older and the handicapped workers. Tables 8 through 11 present the monthly figures from May, 1957, through July, 1958.

Table 8 shows that about 35 per cent of the applicants in the active files were 45 years of age or over. Data on the placement of these older workers are presented in Table 9; only 17.5 per cent of the placements made came from this group of older workers.

The difference between 35 per cent and 17.5 per cent indicates that there is considerable lag in finding employment for individuals 45 years of age and over. This experience was reflected in the Worcester Study which revealed longer periods of unemployment for older applicants (6).

TABLE 8. — *Applicants 45 Years and Over as a Proportion of All Applicants in the Active File of the Massachusetts Division of Employment Security, by Months, May, 1957, through July, 1958.*

APPLICANTS IN FILES.

MONTH.	Total.	AGE 45 AND OVER.	
		N.	Per Cent.
May, 1957	77,431	27,468 ¹	35.5
June, 1957	74,864	—	—
July, 1957	71,336	—	—
August, 1957	70,557	—	—
September, 1957	74,998	—	—
October, 1957	83,632	—	—
November, 1957	84,798	29,134 ¹	34.4
December, 1957	96,129	—	—
January, 1958	101,212	—	—
February, 1958	112,785	—	—
March, 1958	116,343	—	—
April, 1958	121,711	—	—
May, 1958	120,247	40,929 ¹	34.0
June, 1958	124,479	—	—
July, 1958	125,524	—	—
Total	1,456,046	—	34.5

¹Available data limited to samples taken May and November.

Similar trends appear in the placement data for handicapped applicants. Table 10 reveals that about 5.6 per cent of the applicants in the active file are classified as handicapped by the Division's standard. Table 11 indicates that only 3.0 per cent of the placements were handicapped. The difference between the 5.6 and 3.0 indicates that, as in the case of the older workers, placements proceed at a relatively slow rate.

Examining the proportion of all placements drawn from the handicapped applicants by months in the last column of Table 11, the per cent values for October and January appear to be relatively

large. During the month of October, special efforts are made to encourage the employment of handicapped persons through a National Employ the Physically Handicapped Week. These promotional efforts result in a placement rate of 5.7 per cent for the handicapped which is nearly double the average of 3.0 per cent for the 15-month period tabulated. This 5.7 per cent value is not, however, as large as the 6.0 per cent figure for the handicapped applicants in the active file shown in Table 10 for the month of October.

TABLE 9. — *Placements for Applicants 45 Years and Over as a Proportion of All Placements by the Massachusetts Division of Employment Security, by Months, May, 1957, through July, 1958.*

PLACEMENTS.

MONTH.	Total.	AGE 45 AND OVER.	
		N.	Per Cent.
May, 1957	16,907	3,202	18.9
June, 1957	16,600	2,629	15.8
July, 1957	15,290	2,415	15.8
August, 1957	15,604	2,503	16.0
September, 1957	17,703	3,166	17.9
October, 1957	17,845	3,365	18.9
November, 1957	12,377	2,685	21.7
December, 1957	9,993	2,153	21.5
January, 1958	14,894	2,226	14.9
February, 1958	10,700	1,962	18.3
March, 1958	10,307	1,969	19.1
April, 1958	11,347	2,296	20.2
May, 1958	14,185	2,306	16.3
June, 1958	13,834	2,123	15.3
July, 1958	13,167	1,917	14.6
Total	210,753	36,917	17.5

The best placement performance for handicapped persons appears in Table 11 for the month of January when 8.6 per cent of the placements were drawn from the handicapped group. During this same month, Table 10 shows that only 5.6 per cent of the applicants could be classified as handicapped. There are indications, however, that the good performance in January does not reflect durable place-

ments. The high figure may result from seasonal temporary employment in retail sales and in government agencies whose regulations favor handicapped workers in special situations.

TABLE 10. — *Handicapped Applicants as a Proportion of All Applicants in the Active File of the Massachusetts Division of Employment Security, by Months, May, 1957, through July, 1958.*

APPLICANTS IN FILES.

MONTH.	Total.	HANDICAPPED.	
		N.	Per Cent.
May, 1957	77,431	4,851	6.3
June, 1957	74,864	4,613	6.2
July, 1957	71,336	4,288	6.0
August, 1957	70,557	4,285	6.1
September, 1957	74,998	4,461	5.9
October, 1957	83,632	5,056	6.0
November, 1957	84,798	5,264	6.2
December, 1957	96,129	5,438	5.7
January, 1958	101,212	5,554	5.5
February, 1958	112,785	5,771	5.1
March, 1958	116,343	6,122	5.3
April, 1958	121,711	6,131	5.0
May, 1958	120,247	6,575	5.5
June, 1958	124,479	6,529	5.2
July, 1958	125,524	6,639	5.3
Total	1,456,046	81,577	5.6

In general, the placement of both the older and the handicapped workers proceeds at a rate which is well below that for other workers. At best, periods of unemployment are seriously prolonged.

The Division of Employment Security makes special efforts to serve the handicapped applicants, perhaps also to serve the older applicants. Despite special attention, placement does not reach a very good level. Under these circumstances, it would appear desirable to consider how effective the program might become if comprehensive evaluation, training and placement services were provided for both the older and the handicapped applicants for employment.

TABLE 11. — *Placements for Handicapped Applicants as a Proportion of All Placements by the Massachusetts Division of Employment Security, by Months, May, 1957, through July, 1958.*

PLACEMENTS.

MONTH.	Total.	HANDICAPPED.	
		N.	Per Cent.
May, 1957	16,907	500	3.0
June, 1957	16,600	396	2.4
July, 1957	15,290	355	2.3
August, 1957	15,604	378	2.4
September, 1957	17,703	316	1.8
October, 1957	17,845	1,023	5.7
November, 1957	12,377	394	3.2
December, 1957	9,993	221	2.2
January, 1958	14,894	1,285	8.6
February, 1958	10,700	274	2.6
March, 1958	10,307	213	2.1
April, 1958	11,347	239	2.1
May, 1958	14,185	247	1.7
June, 1958	13,834	232	1.7
July, 1958	13,167	217	1.6
Total	210,753	6,290	3.0

Massachusetts Rehabilitation Commission.

The Massachusetts Rehabilitation Commission is the state agency wholly devoted to services for people who have mental or physical defects such that their employment opportunities are seriously impaired. In contrast to the limited services of the Division of Employment Security, this agency can provide detailed evaluations of the problems of handicapped people as well as medical, training, and placement services. Individuals whose handicaps interfere with sound vocational adjustment and who are capable of achieving sound productive and remunerative employment may receive a broad range of highly specialized services.

Table 12 summarizes the services to handicapped individuals during the fiscal year ending June 30, 1958. The lower part of the Table reveals that, at the beginning of the period, there were 2,176 individuals receiving services as active cases; 1,675 individuals were added, making the total for the year 3,851. Of these, 1,031

were closed rehabilitated, that is, satisfactorily employed; another 2,514 were carried over to the next fiscal year.

In the upper part of Table 12, 3,094 new referrals are shown as received during the year. Adding these to the 1,413 cases on hand July 1, 1957, there were 4,507 referrals to be processed. Of these, only 1,989 remained as referrals on June 30, 1958.

TABLE 12. — *Massachusetts Rehabilitation Commission, Referral and Case Load Report from July 1, 1957, through June 30, 1958.*

Referrals:

On hand July 1, 1957	1,413	
New since July 1, 1957	3,094	
Total during period		4,507
Accepted for services since July 1, 1957	1,675	
Closed since July 1, 1957	843	
Total processed during period		2,518
Total referrals remaining as of June 30, 1958		1,989

Active Cases and Cases Closed from Active Load:

Active cases on hand July 1, 1957	2,176	
Accepted for services since July 1, 1957	1,675	
Total in active load		3,851
Closed rehabilitated since July 1, 1957	1,031	
Closed other reasons — <i>after</i> plan initiated, since July 1	83	
Closed other reasons — <i>before</i> plan initiated, since July 1	223	
Total closed cases during period		1,337
Total active cases remaining as of June 30, 1958		2,514

Current operations indicate that about 3,000 referrals are received and about 1,000 individuals are rehabilitated yearly. These figures are reasonably large and the number of handicapped people being served shows a slight increase from year to year. It seems very unlikely, however, that the volume of the services is coming very close to matching the needs in the Commonwealth.

In April of 1958, the Regional Office of the Office of Vocational Rehabilitation, Department of Health, Education and Welfare conducted a program administration review which concerned itself with the operations and facilities of the Massachusetts Rehabilitation Commission. The report on this review (10) indicated, among other things, that the number of disabled persons in need of the Commission's services could be estimated at 56,100. Furthermore, the annual addition to this group was considered to be about 7,020 persons.

The Commission's facilities do not permit operations at the level

indicated by these figures. Services are being increased moderately each year but they do not approach the levels indicated. In fact, the current rate of growth is not likely to match the level indicated by the estimated annual increment of 7,020 new cases for an exceedingly large number of years. Under these circumstances, significant reductions in the estimated backlog of 56,000 disabled persons are not very likely in the near future.

The act establishing the Massachusetts Rehabilitation Commission, chapter 602, provided that "it (the Commission) may establish and operate rehabilitation facilities and workshops, may make grants to public and contracts with private non-profit organizations for such purposes." (7) Although this authorization to establish workshops exists, action along these lines has not been feasible up to the present time. It seems evident, however, that the absence of suitable facilities for both specialized training and sheltered employment constitutes a significant deficiency in the rehabilitation program.

Division of the Blind.

Rehabilitation services for legally blind persons are provided by the Division of the Blind. Table 13 summarizes the program of service during the fiscal year ending June 30, 1958.

During the period covered, 177 new referrals were accepted. Adding these to the 166 carried over from the previous year, 343 referrals were on hand. Of these referrals, 104 were accepted for services as active cases. From the total of 352 active cases, it was possible to close 71 as rehabilitated during the year.

Like the Rehabilitation Commission, this agency can provide the full range of evaluation, medical, training and placement services. The program is restricted, however, to individuals who are disabled by blindness. For this reason, it serves a relatively small but important portion of the handicapped population.

Of the nearly 8,000 registered blind persons, 126 or 1.6 per cent are employed in the workshops operated by the Division. The nature of the services provided in these facilities is not entirely clear.

Other Services.

In many respects, a large number of other agencies, public and private, might be listed as offering a limited kind of vocational adjustment service to handicapped people. On the other hand, none would seem comparable to the large scale operations of the Division

TABLE 13. — *Massachusetts Division of the Blind, Referral and Case Load Report from July 1, 1957, through June 30, 1958.*

Referrals:

On hand July 1	166	
New since July 1	177	
	<hr/>	
Total during period		343
Accepted for services since July 1	104	
Closed since July 1	40	
	<hr/>	
Total processed during period		144
	<hr/>	
Total referrals remaining as of June 30, 1958		199

Active Cases and Cases Closed from Active Load:

Active Cases on hand July 1	248	
Accepted for services since July 1	104	
	<hr/>	
Total in active load		352
Closed rehabilitated since July 1	71	
Closed other reasons — <i>after</i> plan initiated, since July 1	16	
Closed other reasons — <i>before</i> plan initiated, since July 1	23	
	<hr/>	
Total closed cases during period		110
	<hr/>	
Total active cases remaining as of June 30, 1958		242

of Employment Security or to the comprehensive special services of the Massachusetts Rehabilitation Commission and of the Rehabilitation Bureau in the Division of the Blind.

An attempt to enumerate the many other limited services or the broad variety of other services available to all and to certain groups of handicapped persons is beyond the scope of this report.

VII. MAGNITUDE OF THE PROBLEM.

There is available at the present time no truly adequate information on the number of individuals in need of the vocational adjustment services contemplated in a workshop program. A careful study of various groups in the population of the Commonwealth would be required to produce any sound estimates. Under the circumstances of the present report, however, it is desirable to consider some data which are at hand. In this way, the nature and size of the population likely to need vocational services may be indicated roughly.

An effort has been made to gather statistics concerning older and

handicapped persons known to Massachusetts state agencies.¹ The data are not complete, but the number of persons involved is very large. In the groups of individuals represented, many may be expected not only to need but also to benefit from a vocational service program, including sheltered workshops.

Department of Public Welfare.

A brief outline of Public Assistance provided by the Department of Public Welfare is shown in Table 14. During the fiscal year ending June 30, 1958, the Average Monthly Case Load was 118,315. This average number of active accounts was carried at the cost of about \$144,000,000 for the year.

TABLE 14. — *Massachusetts Department of Public Welfare, Public Assistance for Fiscal Year ending June 30, 1958.*

CATEGORY	Average Monthly Case Load.	Total Payments.
Old Age Assistance	85,678	\$97,466,791
Aid to Dependent Children	13,034	23,670,277
Disability Assistance	9,475	13,120,506
General Relief	10,128	9,335,563
Total	118,315	\$143,593,137

For many individuals receiving support, there may be little or no likelihood of achieving a level of productivity or employability which would provide a reasonable proportion or all of the needed income. On the other hand, considering the large number of people involved, it would seem reasonable to expect that appropriate vocational adjustment services might assist a significant number to a useful level of productivity.

A review of the individuals and of the families served with reference to potentials in competitive employment or in sheltered employment would provide significant information. No attempt to anticipate the outcomes can be made here. There is evidence, however, that some are very close to being soundly employable.

During the month of June, 1958, there were 10,349 General Relief accounts; 3,202 or 31 per cent of these were classified as "employable." The interpretation of these data would require further

¹ Statistics presented in Chapter VI for the Division of Employment Security, the *Massachusetts Rehabilitation Commission*, and the Division of the Blind are not repeated here.

analysis with reference to the potentials for employment in each instance. Individuals covered by Old Age Assistance, Aid to Dependent Children, and Disability Assistance would need to be reviewed in a similar manner.

Department of Mental Health.

A major concern of the Department of Mental Health is the maintenance of institutions for the care of individuals with psychiatric disorders such that they must be removed from the community. Although the institutions are sometimes looked upon as places where people are held for relatively long periods, a large proportion of the population changes each year.

Statistics for the fiscal year ending June 30, 1958, appear in Table 15. At the beginning of the period, there were 34,708 patients on the books; at the end of the period, 34,420. Although these numbers are not very different, the population is changing. During the year, 10,733 cases were opened and 11,021 were closed.

TABLE 15. — *Massachusetts Department of Mental Health, Patient Population All Institutions, Fiscal Year ending June 30, 1958.*

	Male.	Female.	Total.
Patients on books June 30, 1957 . . .	15,928	18,780	34,708
Cases opened during year	5,865	4,868	10,733
Total cases during year	21,793	23,648	45,441
Cases closed during year	5,379	5,142	11,021
Patients on books June 30, 1958 . . .	15,914	18,506	34,420
In institution	14,424	16,037	30,461
Out of institution	1,490	2,469	3,959

Table 16 has been prepared to show the various closures for the 11,021 patients; 7,629 were discharged; the remainder were accounted for by transfers and deaths.

It is not difficult to visualize the vocational adjustment problems of 7,629 individuals discharged during the year. Some may not be fully recovered from the viewpoint of the demands of employment. On the other hand, many can be expected to be essentially ready for a return to work. Whatever the situation may be, the individual coming out of an institution for mental disorders frequently is not accepted as a strong candidate for employment.

Business and industry hesitate to assume the risks that may be involved in employing individuals who have very recently been institutionalized because of some mental condition. No degree of assurance by any one is likely to remove this handicap.

TABLE 16. — *Massachusetts Department of Mental Health, Cases closed during Fiscal Year ending June 30, 1958.*

	Male.	Female.	Total.
Cases closed during year	5,879	5,142	11,021
Discharged	4,050	3,579	7,629
Outright	2,756	1,381	4,137
Extramural status	1,294	2,198	3,492
Transfer and discharge commitments . .	596	333	929
Died in institution	1,233	1,230	2,463

As in other handicaps, the basic need is for sound evidence of employability and productivity. Vocational adjustment services, including training and work experience in well-designed facilities, can do a great deal to produce this needed evidence. No information is available to indicate the number who might be helped in this manner. On the other hand, at the rate of 7,000 discharges a year, there is great likelihood that the number needing vocational services exceeds the available facilities.

Hospitals.

The American Hospital Association has published a report on 209 hospitals in the Commonwealth (4). Data on the services provided during the fiscal year ending September 30, 1957, appear in Table 17.

For all hospitals, there were available 67,080 beds. In the year covered, 702,222 admissions were recorded. Assuming that each admission represented a different patient and that the population of the State was 4,866,000, about one in six people can be estimated to have entered a hospital during the year.

In some instances, a hospital admission represents a brief and temporary disability which has no significant effect upon the vocational status or progress of the individual. In others, a terminal illness may be involved. Between these extremes, there are

admissions for illnesses and injuries with residual effects which constitute very real threats to vocational adjustment.

No adequate data are available to indicate the proportion of admissions — or better, the proportion of discharges — with conditions such that vocational adjustment services are indicated. Only a small proportion would constitute a relatively large number of people for any one year. The accumulative total for a period of ten or twenty years might be subject to considerable speculation. The need for sound evidence is very clear.

TABLE 17. — *Massachusetts Hospital Capacity and Utilization, 1957 Annual Survey, American Hospital Association.*¹

CLASSIFICATION.	Hospitals.	Beds.	Admissions.	Census.	Occupancy.
Total	209	67,080	702,222	56,991	85.0
Federal (Total)	11	6,861	30,920	5,847	85.2
Non-Federal (Total)	198	60,219	671,302	51,144	84.9
Psychiatric	26	30,325	13,186	27,904	92.0
Tuberculosis	13	1,765	1,726	1,247	70.7
Long-term general, other special .	19	7,802	10,164	6,656	85.3
Short-term general, other special .	140	20,327	646,226	15,337	75.5
Voluntary	116	16,178	548,633	12,494	77.2
Proprietary	7	391	12,074	295	75.4
State and local government .	17	3,758	85,519	2,548	67.8

¹ Data from Table 8, Part 2, August 1, 1953, *Hospitals*, Volume 32, No. 15, 1953.

Registry of Motor Vehicles.

The Annual Summary of Motor Vehicle Accidents tabulated for 1957 appears as Table 18. For brevity, reference may be made to the totals in the bottom row only.

During the year represented, there were 477 fatal accidents with 519 deaths. The non-fatal accidents numbered 51,044; the persons injured, 86,003.

This last figure on non-fatal injuries is large. Unfortunately, data are not available on the individuals whose condition upon recovery forces a major adjustment in occupational status. In all probability, a significant proportion of the 86,003 with injuries ranging from negligible to permanent total disablement encounter vocational adjustment problems.

TABLE 18. — *Massachusetts Registry of Motor Vehicles, Annual Summary of Motor Vehicle Traffic Accidents, 1957.*

	ACCIDENTS.				PERSONS INJURED.		
	Fatal.	Non-fatal.	Property Damage.	Totals.	Fatal.	Non-fatal.	Totals.
Collisions:							
Pedestrian	181	6,010	—	6,191	181	6,243	6,424
Motor vehicle . .	101	40,055	9,537	49,693	115	72,817	72,932
RR. train . .	2	23	11	36	2	39	41
Street car . .	—	183	34	217	—	289	289
A. D. vehicle . .	—	10	2	12	—	17	17
Bicycle . . .	16	1,332	—	1,348	18	1,387	1,405
Animal . . .	—	27	26	53	—	34	34
Fixed object . .	108	2,214	1,263	3,585	123	3,414	3,537
Other object . .	—	19	5	24	—	32	32
Overturned . .	8	111	68	187	9	192	201
Ran off roadway .	59	833	459	1,351	69	1,269	1,338
Other non-collision .	2	227	6	235	2	270	272
Totals . . .	477	51,044	11,411	62,932	519	86,003	86,522

Division of Industrial Accidents.

During 1955, the industrial injuries reported in Massachusetts reached a total of 238,718. Of these, 52,607 injuries resulted in the loss of at least one day of work. As Table 19 shows, these lost time accidents included 231 deaths as well as 15 permanent total, 2,896 permanent partial, and 49,465 temporary total disabilities.

The lower section of Table 19 presents the distribution of the disability periods for 13,742 temporary total disabilities lasting four weeks or longer. Additional data on the age of all persons involved in tabulatable accidents are shown in Table 20.

Among the large number of individuals injured in industrial accidents, it is certain that many would benefit from a review of their vocational potential. For those whose injuries result in a relatively long disability period, the residual effects can be very significant and assistance may be needed if optimal occupational effectiveness is to be achieved under the new circumstances. Although detailed information is not available, it would seem reasonable to expect that many of the injured have need for comprehensive evaluation services and, in some instances at least, specific training and placement services.

TABLE 19. — *Massachusetts Division of Industrial Accidents, Annual Report, 1955.*

EXTENT OF TOTAL TABULATABLE INJURIES.

EXTENT OF DISABILITY.	N.	Per Cent.
Deaths	231	0.4
Permanent total disabilities	15	0.0
Permanent partial disabilities	2,896	5.5
Temporary total disabilities	49,465	94.0
Total	52,607	100.0

DURATION OF TEMPORARY TOTAL DISABILITIES.

DISABILITY PERIOD.	N.	Per Cent.
4 to 8 weeks	6,769	49.3
8 to 13 weeks	3,168	23.1
13 to 26 weeks	1,974	14.4
26 to 52 weeks	1,148	8.4
Over one year	683	5.0
Total	13,742	100.0

TABLE 20. — *Massachusetts Division of Industrial Accidents, Annual Report, 1955.*

TABULATABLE INJURIES BY AGE.

AGE.	N.	Per Cent.
14 and under	47	0.1
15	54	0.1
16	448	0.9
17	626	1.2
18	875	1.7
19	910	1.7
20 to 24, inclusive	5,072	9.6
25 to 29, inclusive	6,140	11.7
30 to 34, inclusive	6,178	11.7
35 to 39, inclusive	6,295	12.0
40 to 44, inclusive	7,183	13.7
45 to 49, inclusive	5,228	9.9
50 to 54, inclusive	4,686	8.9
55 to 59, inclusive	3,853	7.3
60 to 64, inclusive	3,049	5.8
65 and over	11,963	3.7
Total	52,607	100.0

Disability Adjudication Unit.

The Social Security Law provides certain benefits for disabled individuals. Those over 50 years of age can receive disability insurance benefits; those under 50 can be granted a disability freeze; disabled children may receive certain benefits also.

Applications are processed by the Adjudication Unit of the Massachusetts Rehabilitation Commission. Between April, 1956, and September, 1958, there were 18,892 applications received, an average of about 650 per month. Table 21 shows the rate at which applications were received.

Standard practices have been established to provide for an evaluation of the vocational potential of those applying for benefits. The data are presented here as another indication of the magnitude of the vocational adjustment problem in the State.

TABLE 21. — *Massachusetts Rehabilitation Commission, Disability Adjudication Unit.*

MONTH.	Applications Received.	MONTH.	Applications Received.
April, 1956	80	July, 1957	876
May, 1956	232	August, 1957	703
June, 1956	193	September, 1957	873
July, 1956	228	October, 1957	1,166
August, 1956	301	November, 1957	780
September, 1956	269	December, 1957	784
October, 1956	384	January, 1958	1,015
November, 1956	271	February, 1958	749
December, 1956	241	March, 1958	848
January, 1957	294	April, 1958	873
February, 1957	416	May, 1958	892
March, 1957	573	June, 1958	867
April, 1957	760	July, 1958	876
May, 1957	887	August, 1958	846
June, 1957	741	September, 1958	874
		Total	18,892

Division of Special Education.

The Division of Special Education in the Department of Education maintains a general record of certain groups of handicapped children in the schools. During the 1957-1958 school year, 22,661

children were reported as having certain kinds of handicap. The basic data are shown in Table 22.

There were 12,058 children reported to be retarded (mentally) three or more years; 9,716 of these were enrolled in 675 special classes.

Another 1,348 school children were reported as having serious deficiencies like deafness, aphasia, blindness and partial sight.

In the category of the physically handicapped, 1,734 school children required home instruction, 359 received special instruction, and another 7,162 enrolled in regular classes received special assistance. The physically handicapped thus included 9,255 children.

The total for all reportable deficiencies was 22,661 or about 2.2 per cent of the 1,014,756 children in schools. Recognizing the seriousness of the disabilities represented, it seems evident that, upon the completion of the school program, the handicapped children encounter special problems in vocational adjustment. It is interesting to inquire to what extent adequate services are available and to what extent the children represented achieve the goal of effective employment.

TABLE 22. — *Massachusetts Department of Education, Division of Special Education, Handicapped Children in the Public and Private School Population, School Year, 1957-1958.*

HANDICAP.	Number.
Mental Retardation	12,058
Physical Disability	9,255
Other Disabilities:	
Deaf	588
Aphasia	8
Blind	216
Partially Seeing	536
Total	22,661

Division of Maternal and Child Health.

A register of physically handicapped children is maintained by the Maternal and Child Health Division, Department of Public Health. On June 30, 1958, 39,204 children were on this register. Of these, 17,921 had orthopedic handicaps; 21,283, other kinds of handicap.

Some of the children may be included among those known to the

Division of Special Education but it is of interest to note that nearly 40,000 handicapped children are known to this agency in the Department of Public Health.

Division of the Blind.

The Division of the Blind in the Department of Education maintains a census of blind persons in the State. On June 30, 1958, the register included 7,923 blind; 2,212 or 35.8 per cent were under 45 years of age; 1,926 or 43.3 per cent were between the ages 45 and 64. The complete tabulation by age and sex is shown in Table 23.

TABLE 23. — *Massachusetts Division of the Blind, Blind Persons on the Register, June 30, 1958, by Age and Sex.*

AGE IN YEARS.	Total.	Male.	Female.
Under 1	3	3	0
1 to 2	9	5	4
2 to 3	15	12	3
3 to 4	26	16	10
4 to 5	42	22	20
5 to 9	337	169	168
10 to 14	314	176	138
15 to 19	185	99	86
20 to 24	175	99	76
25 to 29	197	117	80
30 to 34	265	168	97
35 to 39	317	194	123
40 to 44	327	190	137
45 to 49	340	195	145
50 to 54	425	220	205
55 to 59	509	263	246
60 to 64	652	293	359
65 to 69	716	329	287
70 to 74	749	319	430
75 to 79	748	307	441
80 to 84	718	246	472
85 to 89	492	170	322
90 to 94	198	71	127
95 to 99	37	6	31
100	10	2	8
Age unknown	117	50	67
Total	7,923	3,741	4,182

Division of Tuberculosis Control.

Despite great progress in reducing the prevalence of and deaths from tuberculosis, the Division of Tuberculosis Control in the Department of Public Health records a considerable amount of institutional activity. Table 24 presents a comparison of total figures for 1957 and 1958.

For both years, it can be stated that the population in sanatoria was about 1,700. The annual rate for admissions and discharges was about 2,500. It seems reasonable to consider that a good portion of the discharges might benefit from vocational adjustment services, including sheltered workshop services.

TABLE 24. — *Massachusetts Department of Public Health, Division of Tuberculosis Control; State, County, Municipal, Private and Welfare Institutions.*

YEAR.	Number in Sanatorium, June 30	Admissions for Treatment, Fiscal Year.	Discharged Treatment Discontinued (or by Death), Fiscal Year.
1957	1,768	2,559	2,666 (256)
1958	1,678	2,457	2,521 (259)

VIII. CONCLUSIONS AND RECOMMENDATIONS.

The breath of the problems presented by House Documents numbered 1216 and 1217 could not be reviewed adequately in this report. A major research undertaking would be necessary to make a detailed evaluation of various matters relating to the establishment of sheltered workshops. It would seem, also, that the investigation should be concerned with the general nature of the vocational problems of handicapped people as well as with the services needed in the form of workshops and other facilities.

Sheltered Workshops.

Sheltered workshops are, for the most part, intended to provide remunerative employment for marginally productive workers who cannot be employed by business or industry. There are, however, great differences among sheltered workshops. Various services can meet important needs of communities and of handicapped people. On the other hand, relatively little information is available on the number of persons who might require the assistance of different kinds of workshop.

The sound development of sheltered workshops would depend upon a careful study of needs. Only with such study would it be possible to indicate clearly the nature of the facilities which should be developed. Generally speaking, the specifications should give consideration to (a) the handicapped people to be served, (b) the level of productivity expected, (c) the extent to which the program is dependent upon subsidy.

Training Facilities.

The solution of the employment problems of handicapped persons is in large degree dependent upon effective training and retraining for work. Programs designed to meet the needs of different individuals, however, may not be met by relatively small facilities in various communities. For any handicapped person with a serious employment problem, comprehensive services are needed (a) to evaluate the existing vocational potential with due consideration of basic talents and limitations, (b) to train as necessary along the occupational lines which afford reasonable opportunities for employment, and, finally, (c) to locate suitable and durable employment.

Sheltered workshops designed to provide remunerative employment for marginally productive workers may be expected to differ from a service designed to provide effective training for employment in business or industry. Possibly consideration should be given to the advisability of establishing special facilities for evaluation, training and placement services, as such.

This approach to vocational adjustment services for handicapped people would not change the need for various sheltered workshops to employ those unable to be competitively productive. It might be hoped, however, that adequate evaluation and training could raise more individuals to the level of competitive productivity and provide better selection for the marginal workers placed in sheltered employment.

The Older Workers.

The employment problems of older workers are marked and population trends indicate that the numbers involved are increasing. It seems desirable not only to study the vocational services needed by this group but also to plan for the best possible utilization of the productive capacity of this portion of the labor force.

The Disabled Workers.

Although adequate data are not available, the population of disabled workers may be increasing. Means are needed to solve various vocational problems of handicapped individuals and to utilize their productive capacity in competitive employment when possible or in sheltered employment when necessary.

Services Available.

Although public and private agencies attempt to meet the needs of handicapped workers, the services do not appear to be ample. An investigation of the means whereby the existing facilities might be improved and enlarged appears highly desirable.

House Document Number 1216.

The need for sheltered workshops may be great and action to support this kind of facility in various municipalities may be indicated. On the other hand, the nature and magnitude of the services required are not entirely clear. Furthermore, with regard to the purpose of training people for employment in business and industry, it is not certain that sheltered employment facilities would be truly effective.

Under these circumstances, the steps outlined in House Document No. 1216 do not appear advisable at this time. A prior concern would seem to be a general clarification of community needs in services for older and handicapped workers.

House Document Number 1217.

This Document provides for an investigation and study of the need for sheltered workshops for the training and employment of the disabled in the Commonwealth. Action of this kind would be highly desirable. Only through a more complete study of sheltered workshops and their relationship to other kinds of vocational service can we expect to develop effective programs to resolve the employment difficulties of handicapped people in the Commonwealth.

Legislative action along the line of House Document No. 1217 is strongly recommended. It should be noted, however, that ample time and funds are essential to the proposed investigation. A sound program cannot be devised without basic information on

matters relating to the handicapped persons to be served through provisions for sheltered employment and through training for competitive employment.

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